What is claimed is:

1. A gaseous composition at a temperature below about 200° C. at atmospheric pressure, adapted to deposit at least a first layer of tin oxide and silicon oxide onto glass at a rate of deposition greater than about 350 Å/sec. wherein the composition comprises a precursor of tin oxide, a precursor of silicon oxide of formula $R_mO_nSi_p$, where m is from 3 to 8, n is from 1 to 4, p is from 1 to 4, and R is independently chosen from hydrogen and acyl, straight, cyclic, or branched-chain alkyl and substituted alkyl or alkenyl of from one to about six carbons, and phenyl or substituted phenyl, an accelerant selected from the group consisting of organic phosphites, organic borates and water, and mixtures thereof, and a source of oxygen.

2. The gaseous composition of claim 1, adapted to deposit at least a first layer comprising tin oxide and silicon oxide onto transparent flat glass at a temperature of from 450° to about 650° C.

3. The gaseous composition of claim 1, adapted to deposit at least a first layer comprising tin oxide and silicon oxide onto transparent flat glass to produce a glass article having essentially no reflected color in daylight.

4. The gaseous composition of claim 1 adapted to continuously deposit at least a first layer of tin oxide and silicon oxide onto a continuously moving transparent flat glass substrate.

5. The composition of claim 1 at a temperature below about 175° C.

6. The composition of claim 1 wherein the organic phosphite and organic borate accelerants have the formula $(R''O)_3P$ and $(R''O)_3B$ where R'' is independently chosen from straight, cyclic or branched-chain alkyl or alkenyl of from one to about six carbons; phenyl, substituted phenyl, or R''' CH_2CH_2—, where R''' is MeO_2C—, EtO_2C—, CH_3CO—, or HOOC—.

7. The composition of claim 1 wherein the precursor of the tin oxide is R_nSnX_{4-n}, where R is a straight, cyclic, or branched-chain alkyl, or alkenyl of from one to about six carbons; phenyl, substituted phenyl, or $R'CH_2CH_2$—, where R' is MeO_2C—, EtO_2C—, CH_3CO—, or HO_2C—; X is selected from the group consisting of halogen, acetate, perfluoroacetate, and their mixtures; and where n is 0, 1, or 2.

8. The composition of claim 1 wherein the precursor of the tin oxide is an alkyltin halide.

9. The composition of claim 1 wherein the precursor of the tin oxide is an alkyltin chloride.

10. The composition of claim 1 wherein the precursor of the tin oxide is chosen from the group consisting of monobutylytin trichloride, dibutylytin dichloride, tributylytin chloride, and tin tetrachloride.

11. The composition of claim 1 wherein the precursor of silicon oxide is selected from the group consisting of tetraethylorthosilicate, diacetoxydi-t-butoxysilane, ethyltriacetoxysilane, methyltriacetoxysilane, methyldiacetoxylsilane, tetramethyldisiloxane, tetraramethylcyclotetrasiloxane, dipinacoloxysilane, 1,1-dimethylsila-2-oxacyclohexane, tetrakis (1-methoxy-2-propoxy) silane, and triethoxysilane.

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12. The composition of claim 1 wherein the precursor of silicon oxide is tetraethylorthosilicate.

13. The composition of claim 1 wherein the accelerant comprises triethyl phosphite.

14. The composition of claim 1 wherein the accelerant comprises triethyl phosphite and triethyl borate.

15. The gaseous composition of claim 1 adapted to deposit at least a first layer of tin oxide and silicon oxide onto glass at a rate of deposition greater than about 400 Å/sec.

16. The gaseous composition of claim 1 adapted to deposit at least a first amorphous layer of tin oxide and silicon oxide onto glass.

17. The gaseous composition of claim 1 adapted to deposit a plurality of layers comprising tin oxide and silicon oxide onto glass, the outermost layer of which is further adapted for deposit of at least a second layer.

18. The composition of claim 17 adapted to deposit a plurality of layers comprising tin oxide and silicon oxide onto glass, the outermost layer of which is further adapted for deposit of a layer comprising tin oxide.

19. The composition of claim 17 adapted to deposit a plurality of layers comprising tin oxide and silicon oxide onto glass the outermost layer of which is further adapted for deposit of a layer comprising tin oxide and fluorine.

20. The composition of claim 17 wherein the second layer comprises a doped tin oxide.

21. The composition of claim 17 wherein said plurality of layers are deposited from a precursor mixture comprising monobutyltin trichloride, tetraethyl orthosilicate and triethyl phosphite.

22. The composition of claim 1 adapted to deposit at least a first layer comprising tin oxide and silicon oxide onto glass, said first layer having a refractive index which changes continuously between the glass substrate and the top of the layer.

~~23.~~ A gaseous composition at a temperature below about 200° C. at atmospheric pressure, adapted to deposit at least a first amphorous layer comprising tin oxide and silicon oxide onto glass at a rate of deposition greater than about 400 Å/sec., the layer having a controlled index of refraction, wherein the composition comprises a tin oxide precursor, a silicon oxide precursor of formula $R_mO_nSi_p$, where m is from 3 to 8, n is from 1 to 4, p is from 1 to 4, and R is independently chosen from hydrogen and acyl, straight, cyclic, or branched-chain alkyl and substituted alkyl or alkenyl of from one to about six carbons, and phenyl or substituted phenyl, and at least one accelerant chosen from the group consisting of boron and phosphorous esters and water.

24. The gaseous composition of claim 23 adapted to continuously deposit at least a first layer comprising tin oxide and silicon oxide onto a continuously moving flat glass substrate at a temperature of from about 450° to about 650° C., and comprising monobutyltin trichloride, tetraethyl orthosilicate and an accelerant.

~~25.~~ A gaseous composition at a temperature below about 200° C. and at atmospheric pressure, adapted to deposit at least a first layer comprising amorphous tin

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oxide and silicon oxide onto glass at a temperature of front about 450° to 650° C. at a rate of deposition greater than about 350 Å/sec., wherein the composition comprises:

a tin oxide precursor of formula R_nSnX_{4-n}, where R is a straight, cyclic, or branched-chain alkyl, or alkenyl of from one to about six carbons; phenyl, substituted phenyl, or $R'CH_2CH_2$—, where R' is MeO_2C—, EtO_2C—, CH_3CO—, or HO_2C—; X is selected from the group consisting of halogen, acetate;, perfluoroacetate, and their mixtures; and where n is 0, 1, or2;

a silicon oxide precursor of formula $R_mO_nSi_p$, where m is from 3 to 8, n is from 1 to 4, p is from 1 to 4, and R is independently chosen from hydrogen and acyl, straight, cyclic, or branched-chain alkyl and substituted alkyl or alkenyl of from one to about six carbons, and phenyl or substituted phenyl;

one or more accelerants selected from the group consisting of water and organic phosphites and organic borates of formula $(R''O)_3P$ and $(R''O)_3B$ where R'' is independently chosen from straight, cyclic or branched-chain alkyl or alkenyl of from one to about six carbons; phenyl, substituted pheny, or R''' CH_2CH_2—, where R''' is MeO_2C—, EtO_2C—, CH_3CO—, or HOOC—; and

a source of oxygen.

26. A composition according to claim **25** in which the precursor of the tin oxide is an alkyltin halide, the precursor of the silicon oxide is tetraethylorthosilicate, diacetoxydi-t-butoxysilane, ethyltriacetoxysilane, methyltriacetoxysilane, methyldiacetoxylsilane, tetramethyldisiloxane, tetramethylcyclotetrasiloxane, dipinacoloxysilane, 1,1-dimethylsila-2-oxacyclohexane, tetrakis (1-methoxy-2-propoxy) silane, or triethoxysilane, and the accelerant comprises one or both of triethyl phosphite and triethyl borate.

27. A composition according to claim **26** in which the tin oxide precursor comprises monobutyltin trichloride, the silicon oxide precursor comprises tetraethyl orthosilicate and the accelerant comprises triethyl phosphite.

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28. A gaseous composition comprising at least one precursor of a metal oxide and an accelerant selected from the group consisting of organic phosphites, organic borates, and water.

29. The gaseous composition of claim 28, wherein at least one precursor for a metal oxide is selected from the group consisting of compounds of tin, germanium, titanium, aluminum, zirconium, zinc, indium, cadmium, hafnium, tungsten, vanadium, chromium, molybdenum, iridium, nickel, and tantalum.

30. The gaseous composition of claim 28, further comprising a precursor for a silicon oxide.

31. A gaseous composition comprising a metal oxide precursor and an accelerant selected from the group consisting of phosphites, borates, water, alkyl phosphine, arsine and borane derivatives, PH_3, AsH_3, B_2H_6, O_2, N_2O, NF_3, NO_2 and CO_2.

32. The gaseous composition of claim 31, wherein the metal oxide precursor is a precursor of metal oxides selected from the group consisting of tin oxide, germanium oxide, titanium oxide, aluminum oxide, zirconium oxide, zinc oxide, indium oxide, cadmium oxide, hafnium oxide, tungsten oxide,

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vanadium oxide, chromium oxide, molybdenum oxide, iridium oxide, nickel oxide, and tantalum oxide.

~~33.~~ A film comprising one or more metal oxides and an accelerant.

34. The film of claim 33, wherein said metal oxide is selected from the group of tin oxide, germanium oxide, titanium oxide, aluminum oxide, zirconium oxide, zinc oxide, indium oxide, cadmium oxide, hafnium oxide, tungsten oxide, vanadium oxide, chromium oxide, molybdenum oxide, iridium oxide, nickel oxide, and tantalum oxide.

35. The film of claim 33, wherein said accelerant is selected from the group consisting of phosphites, borates, water, alkyl phosphine, arsine and borane derivatives, PH_3, AsH_3, B_2H_6, O_2, N_2O, NF_3, NO_2 and CO_2.

36. The film of claim 33, wherein said accelerant is triethylphosphite.

37. The film of claim 33, further comprising a silicon oxide.

38. The film of claim 33, wherein said film is amorphous.

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39. An article comprising a substrate and a film of claim 33 deposited thereon.

40. An article comprising a substrate and a film of claim 34 deposited thereon.

41. An article comprising a substrate and a film of claim 35 deposited thereon.

42. An article comprising a substrate and a film of claim 36 deposited thereon.

43. An article comprising a substrate and a film of claim 37 deposited thereon.

44. An article comprising a substrate and a film of claim 38 deposited thereon.

45. An article of claim 39, wherein the substrate is glass.

46. An article of claim 39, wherein the film has a refractive index which changes continuously.

47. An article of claim 39, wherein the film comprises a plurality of layers.

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48. An article of claim 47, wherein each layer contains a mixture of tin and silicon oxides.

49. An article of claim 48, wherein each layer contains a concentration of tin oxide and silicon oxide different from an adjacent layer.

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